

S.N. 09/813,205
Art Unit 2862
Atty Dkt 10013284-1

REMARKS

Claims 1-21 were pending in the application prior to this amendment. Claims 1, 9 and 10 have been amended. Claims 2, 13, 20 and 21 have been canceled without prejudice to applicants' right to re-present one or more of these claims in a continuation application. Claims 3-8, 11, 12 and 14-19 remain in the application unchanged. Accordingly, after entry of this amendment, claims 1, 3-12 and 14-19 will be pending in the application. Reexamination and reconsideration are requested.

I. Title of the Invention

On page 2 of the Office action, the Examiner indicates that the title of the invention is not descriptive. In response, applicants have amended the title herein to read as follows:

IMAGING APPARATUS AND METHOD OF ASSEMBLING

It is believed that this amended title is adequately descriptive of the invention as currently claimed.

II. Objection to the Disclosure

On pages 2-3 of the Office action, the Examiner objects to the disclosure due to various formalities. Each of the Examiner's points is addressed in sequence below.

The Examiner notes that there is no mention in the written description of reference numeral 372 (appearing in Fig. 1). In response, applicants have amended Fig. 1 to remove reference numeral 372.

The Examiner points out that reference numeral 156 is not shown in Fig. 2 and that reference numeral 164 (Fig. 2) is not mentioned in the written description. In response, applicants have amended the specification at page 11, line 35 to delete the reference numeral 156 and add the numeral 164.

Applicants have amended the specification at page 13, line 12 by placing the designation "(Fig. 4)" after "336" instead of after "334" in accordance with the Examiner's suggestion.

The Examiner points out that reference numeral 334 is used to refer to both the second sidewall in Fig. 4 and a hole in Figs. 3 and 6. In response, applicants have amended the specification and drawings such that reference numeral 334 refers to the hole and new reference numeral 333 refers to the second sidewall. Specifically, Fig. 4 has been amended to change the

sidewall designation "334" to new reference numeral "333". The specification has been amended at page 13, line 12 to change "second sidewall 334" to now read "second sidewall 333".

The Examiner indicates that "it is not clear how tapered wall portion 202 facilitates transmission of the imaging light beam from the target to the lens assembly." In response, applicants note that the tapered wall portion 202 (e.g., Fig. 3) facilitates transmission of the imaging light beam simply by providing physical clearance for the beam. As can be appreciated from an examination of Figs. 2 and 3, for example, without the tapered wall portion, the inside surface 80 of the media handler sidewall 46 would obstruct at least a portion of the light beam.

The Examiner questions whether the angle "g" was intended to be shown in Fig. 6. In response, applicants have amended Fig. 6 to add the angle "g".

The Examiner notes that the reference numeral "274" is not shown in Fig. 8. In response, applicants have amended Fig. 8 to add reference numeral 274.

The Examiner points out that, in line 13 of page 17, "210" (second occurrence) should be "200" and that "200" should be "212". Applicants have amended page 17 of the specification in accordance with the Examiner's instructions.

The Examiner points out on page 18 of the specification that "256" should be "258" in line 4 and that "304" should be "314" in line 10. Applicants have amended the specification in accordance with the Examiner's suggestions.

The Examiner notes that a word is missing between "to" and "the" in line 11 of page 19. In response, applicants have amended the specification to add the word "move" in this location.

For the reasons discussed above, all of the Examiner's objections are believed to be addressed.

Applicants have also amended Fig. 9 herein to correct a minor error appearing therein. Specifically, the reference numeral "256" denotes two features in the drawing. Fig. 9 has been amended to denote the hole with reference numeral "258" instead of "256"

III. 35 U.S.C. §112, Second Paragraph Rejection of Claims 2, 9 and 13

Claims 2, 9 and 13 stand rejected under 35 U.S.C. §112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Reexamination and reconsideration of the Examiner's rejection are requested.

Claims 2 and 9

The Examiner states the following on page 3 of the Office action:

In claims 2 and 3 [sic., 13?] it is not clear how the photo sensor assembly is related to the lens assembly and how the photo sensor assembly reference surface is related to the first and second reference surfaces. In claim 9, it is not clear how the light source is related to the lens assembly of claim 1.

Claim 2 has been canceled herein and the language from claim 2 incorporated into claim 1. Claim 1, as amended herein, recites the following:

An imaging apparatus comprising:
an imaging apparatus housing, said imaging apparatus housing comprising at least one first reference surface and at least one second reference surface, said first and second reference surfaces being

rigidly affixed to said housing;

wherein, said at least one first reference surface is coplanar with said at least one second reference surface;

wherein, said at least one first reference surface is discontinuous with said at least one second reference surface;

at least one lens assembly in contact with both said at least one first and at least one second reference surfaces;

wherein, said housing further includes at least one photosensor assembly reference surface; and

wherein, at least a portion of said photosensor assembly is in contact with said at least one photosensor assembly reference surface.

Claim 1 recites a housing comprising the first and second reference surfaces and the at least one photosensor assembly reference surface. Thus, the housing clearly comprises all of these surfaces. Accordingly, the first and second reference surfaces are clearly related to the photosensor assembly reference surface since the housing comprises all of these surfaces.

Claim 1 further recites that at least a portion of the photosensor assembly "is in contact with" the at least one photosensor assembly reference surface and that the at least one lens assembly is "in contact with both" of the at least one first and at least one second reference surfaces. Accordingly, the photosensor assembly is clearly related to the lens assembly since both are in contact with reference surfaces of the housing.

For at least the reasons set forth above, applicants respectfully assert that the language of claim 2 (now appearing in claim 1) is definite and fully complies with the dictates of 35 U.S.C. §112, second paragraph. If the Examiner intends to maintain the present rejection, then applicants respectfully request that the Examiner provide further explanation as to why

the language in question is believed not to comply with the statute and also a citation to proper authority (e.g., case law or the MPEP) in support of the Examiner's position.

Claim 9, as amended herein, recites the following:

The imaging apparatus of claim 1 wherein:

said housing further comprises at least one wall member;

said at least one first reference surface and said at least one second reference surface are integrally formed in a said wall member;

said wall member includes a mounting mechanism integrally formed therein; and

~~wherein a light source mounted on~~ said mounting mechanism is adapted to mount a light source.

Claim 9 has been amended herein, as indicated above, to now more positively recite the wall member and the light source. Claim 9, thus, recites that the light source is mounted on the mounting mechanism of the wall member and that the first and second reference surfaces are formed in the wall member. Claim 1, from which claim 9 depends, recites that the lens assembly is in contact with the first and second reference surfaces. Accordingly, the light source is related to the lens assembly since both are in contact with the wall member.

Claim 13

Claim 13 has been canceled herein and the language from claim 13 incorporated into independent claim 10. Claim 10, as amended herein, recites the following:

A method of assembling an imaging apparatus, said method comprising:

providing an imaging apparatus housing comprising at least one first reference surface and at least one second reference surface, said first and second reference surfaces being rigidly affixed to said housing;

providing at least one lens;

wherein, said at least one first reference surface is coplanar with said at least one second reference surface;

wherein, said at least one first reference surface is discontinuous with said at least one second reference surface;

using said at least one first reference surface and said at least one second reference surface to align said lens with said imaging apparatus housing by contacting said lens with said at least one first reference surface and said at least one second reference surface;

providing at least one photosensor assembly;

providing said housing with at least one photosensor assembly reference surface; and

aligning said at least one photosensor assembly with said housing by contacting at least a portion of said photosensor assembly with said photosensor assembly reference surface.

Claim 10 recites providing a housing comprising the first and second reference surfaces and the at least one photosensor assembly reference surface. Thus, the housing clearly comprises all of these surfaces. Accordingly, the first and second reference surfaces are clearly related to the photosensor assembly reference surface since the housing comprises all of these surfaces.

Claim 10 also recites "contacting at least a portion of said photosensor

assembly with said photosensor assembly reference surface". Further, claim 10 has been amended herein, as underlined above, to now positively recite contact between the lens and the first and second reference surfaces. Accordingly, the photosensor assembly is clearly related to the lens since both contact the housing.

For the reasons set forth above, the Examiner's rejection is believed to be addressed.

IV. 35 U.S.C. §102(e) Rejection of Claims 1, 3-8, 10-12 and 14-19

Claims 1, 3-8, 10-12 and 14-19 stand rejected under 35 U.S.C. §102(e) as being anticipated by Harrigan et al. (U.S. 6,069,752). Reexamination and reconsideration of the Examiner's rejection are requested.

Claims 1 and 3-8

Claim 1, as amended herein, recites the following:

An imaging apparatus comprising:

an imaging apparatus housing, said imaging apparatus housing comprising at least one first reference surface and at least one second reference surface, said first and second reference surfaces being rigidly affixed to said housing;

wherein, said at least one first reference surface is coplanar with said at least one second reference surface;

wherein, said at least one first reference surface is discontinuous with said at least one second reference surface;

at least one lens assembly in contact with both said at least one first and at least one second reference surfaces;

wherein, said housing further includes at least one photosensor assembly reference surface; and

wherein, at least a portion of said photosensor assembly is in contact with said at least one photosensor assembly reference surface.

Claim 1 has been amended herein to now include the limitations previously appearing in dependent claim 2 as highlighted above. Claim 2 has been canceled. Since claim 2 was not rejected over the Harrigan et al. reference, this amendment is believed to overcome the Examiners rejection.

Claims 3-8 are allowable at least as depending from allowable base claim 1.

Claims 10-12 and 14-19

Claim 10, as amended herein, recites the following:

A method of assembling an imaging apparatus, said method comprising:

providing an imaging apparatus housing comprising at least one first reference surface and at least one second reference surface, said first and second reference surfaces being rigidly affixed to said housing;

providing at least one lens;

wherein, said at least one first reference surface is coplanar with said at least one second reference surface;

wherein, said at least one first reference surface is

discontinuous with said at least one second reference surface; and
using said at least one first reference surface and said at least one second reference surface to align said lens with said imaging apparatus housing by contacting said lens with said at least one first reference surface and said at least one second reference surface;
providing at least one photosensor assembly;
providing said housing with at least one photosensor assembly reference surface; and
aligning said at least one photosensor assembly with said housing by contacting at least a portion of said photosensor assembly with said photosensor assembly reference surface.

Claim 10 has been amended herein to now include the limitations previously appearing in dependent claim 13 as highlighted above. Claim 13 has been canceled. Since claim 13 was not rejected over the Harrigan et al. reference, this amendment is believed to overcome the Examiners rejection.

Claims 11, 12 and 14-19 are allowable at least as depending from allowable base claim 10.

V. 35 U.S.C. §102(e) Rejection of Claims 1-4 and 9-15

Claims 1-4 and 9-15 stand rejected under 35 U.S.C. §102(e) as being anticipated by Ashe et al. (U.S. 6,178,016). Reexamination and reconsideration of the Examiner's rejection are requested.

Claims 1-4 and 9

Claim 1, as amended herein, recites the following:

An imaging apparatus comprising:
an imaging apparatus housing, said imaging apparatus housing comprising at least one first reference surface and at least one second reference surface, **said first and second reference surfaces being rigidly affixed to said housing;**
wherein, said at least one first reference surface is coplanar with said at least one second reference surface;
wherein, said at least one first reference surface is discontinuous with said at least one second reference surface;
at least one lens assembly in contact with both said at least one first and at least one second reference surfaces;
wherein, said housing further includes at least one photosensor assembly reference surface; and
wherein, at least a portion of said photosensor assembly is in contact with said at least one photosensor assembly reference surface.

Claim 1 has been amended herein, as highlighted above, to now recite that the first and second reference surfaces are “rigidly affixed” to the housing. This limitation is clearly supported by applicants’ originally-filed application with reference, for example, to drawing Figs. 3 and 4. No new matter has been added.

Claim 1, as amended, clearly defines over the Ashe et al. reference since the Ashe et al. pressure pads 105 are “spring biased” (as noted by the Examiner on page 5 of the Office action). Accordingly, the Examiner’s rejection is believed to be overcome.

Claims 3, 4 and 9 are allowable at least as depending from allowable base claim 1. Claim 2 has been canceled.

Claim 10, as amended herein, recites the following:

A method of assembling an imaging apparatus, said method comprising:

providing an imaging apparatus housing comprising at least one first reference surface and at least one second reference surface, **said first and second reference surfaces being rigidly affixed to said housing;**

providing at least one lens;

wherein, said at least one first reference surface is coplanar with said at least one second reference surface;

wherein, said at least one first reference surface is discontinuous with said at least one second reference surface; ~~and~~

using said at least one first reference surface and said at least one second reference surface to align said lens with said imaging apparatus housing by contacting said lens with said at least one first reference surface and said at least one second reference surface; providing at least one photosensor assembly;

providing said housing with at least one photosensor assembly reference surface; and

aligning said at least one photosensor assembly with said housing by contacting at least a portion of said photosensor assembly with said photosensor assembly reference surface.

Claim 1 has been amended herein, as highlighted above, to now recite that the first and second reference surfaces are "rigidly affixed" to the housing

in a manner similar to the amendment to claim 1 discussed above.

Claim 10, thus, is allowable for at least the same reasons as advanced above with respect to claim 1.

Claims 11, 12, 14 and 15 are allowable at least as depending from allowable base claim 10. Claim 13 has been canceled.

VI. 35 U.S.C. §103(a) Rejection of Claims 5-8 and 16-19

Claims 5-8 and 16-19 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Ashe et al. (U.S. 6,178,016) in view of Harrigan et al. Reexamination and reconsideration of the Examiner's rejection are requested.

Claims 5-8 are allowable at least as depending from allowable base claim 1. Claims 16-19 are allowable at least as depending from allowable base claim 10.

For the reasons set forth above, applicants assert that all of the claims are allowable.

Respectfully submitted,

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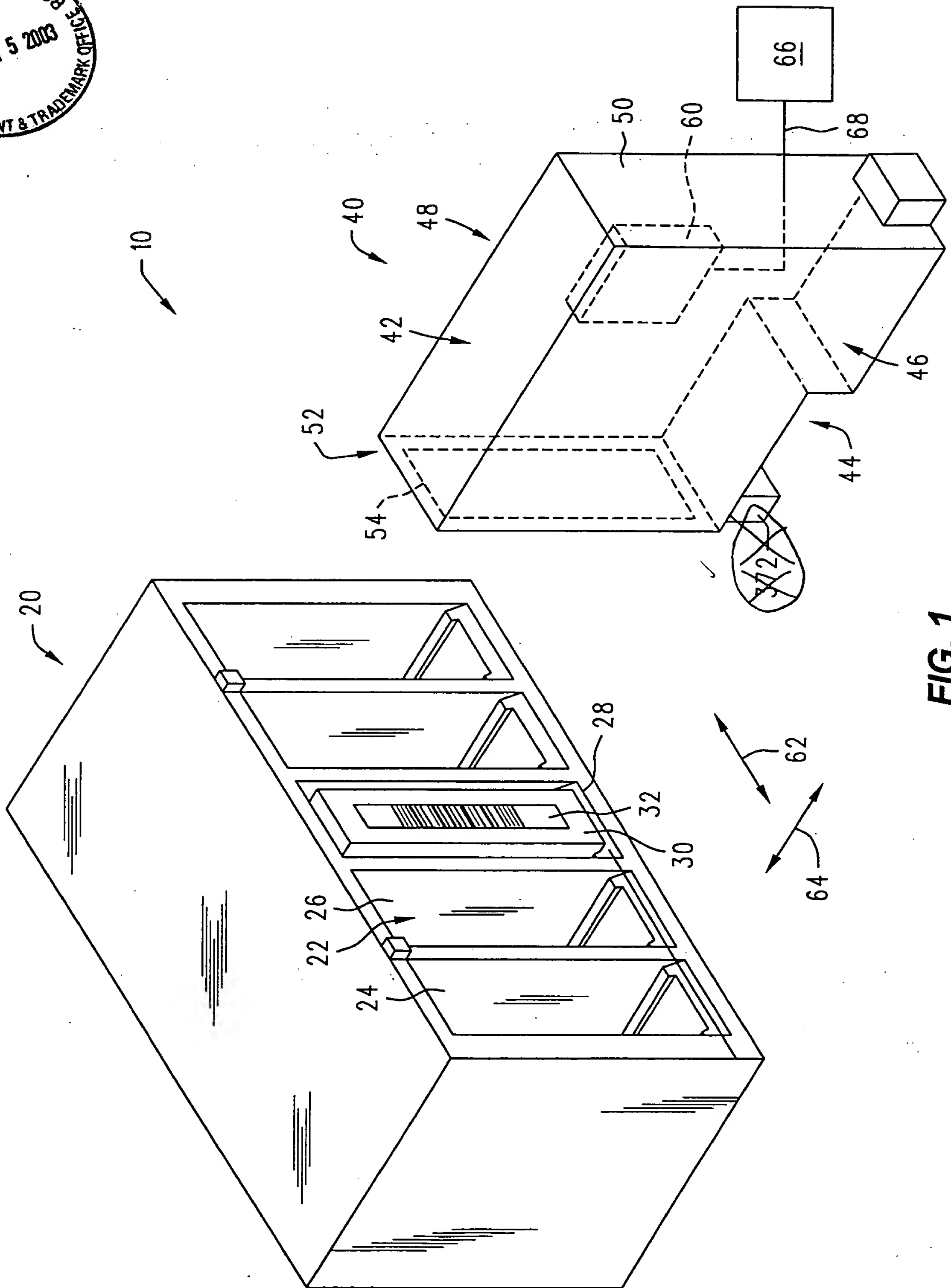
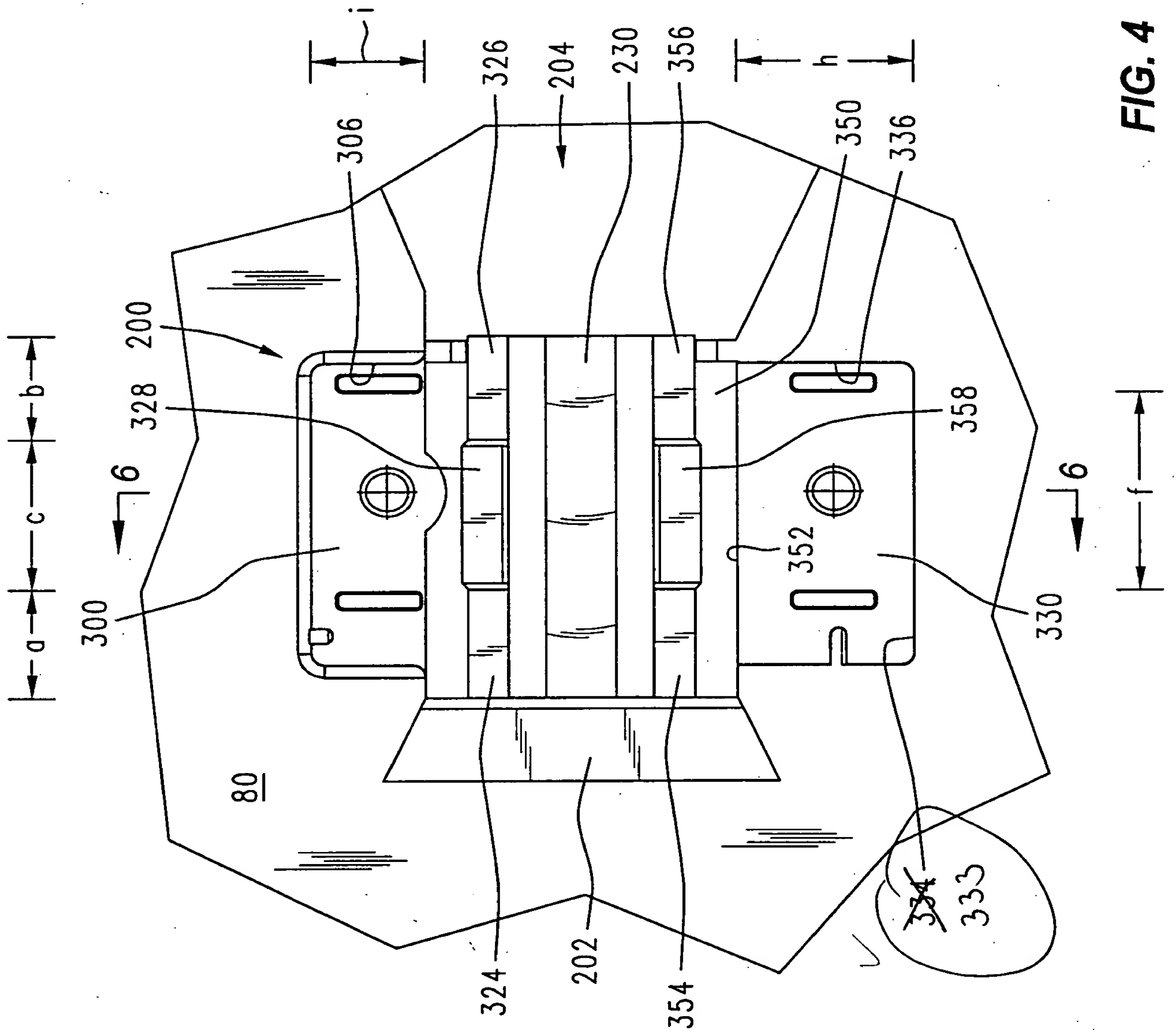
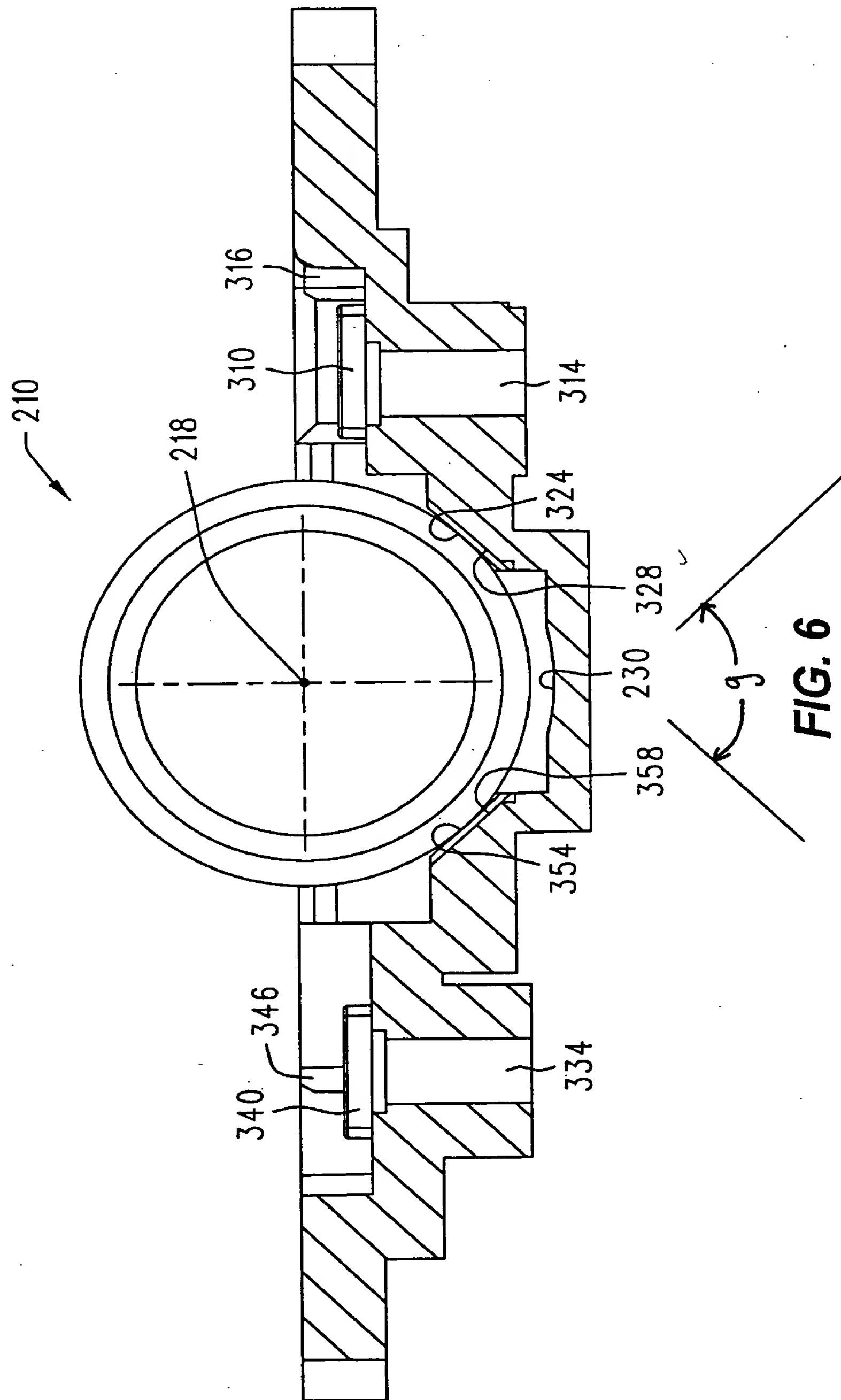


FIG. 1

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approved
 GRS



approved
GRS



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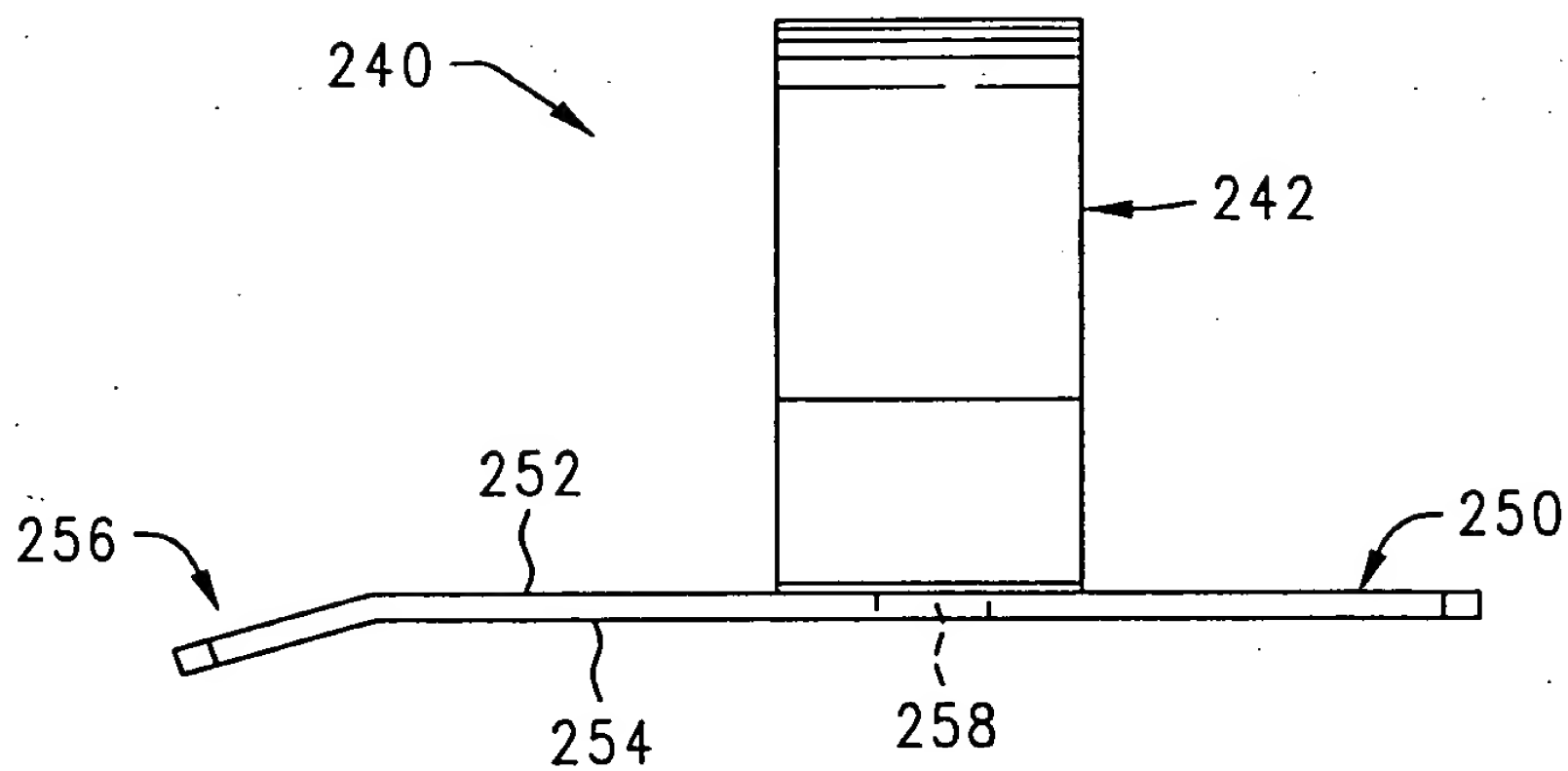


FIG. 7

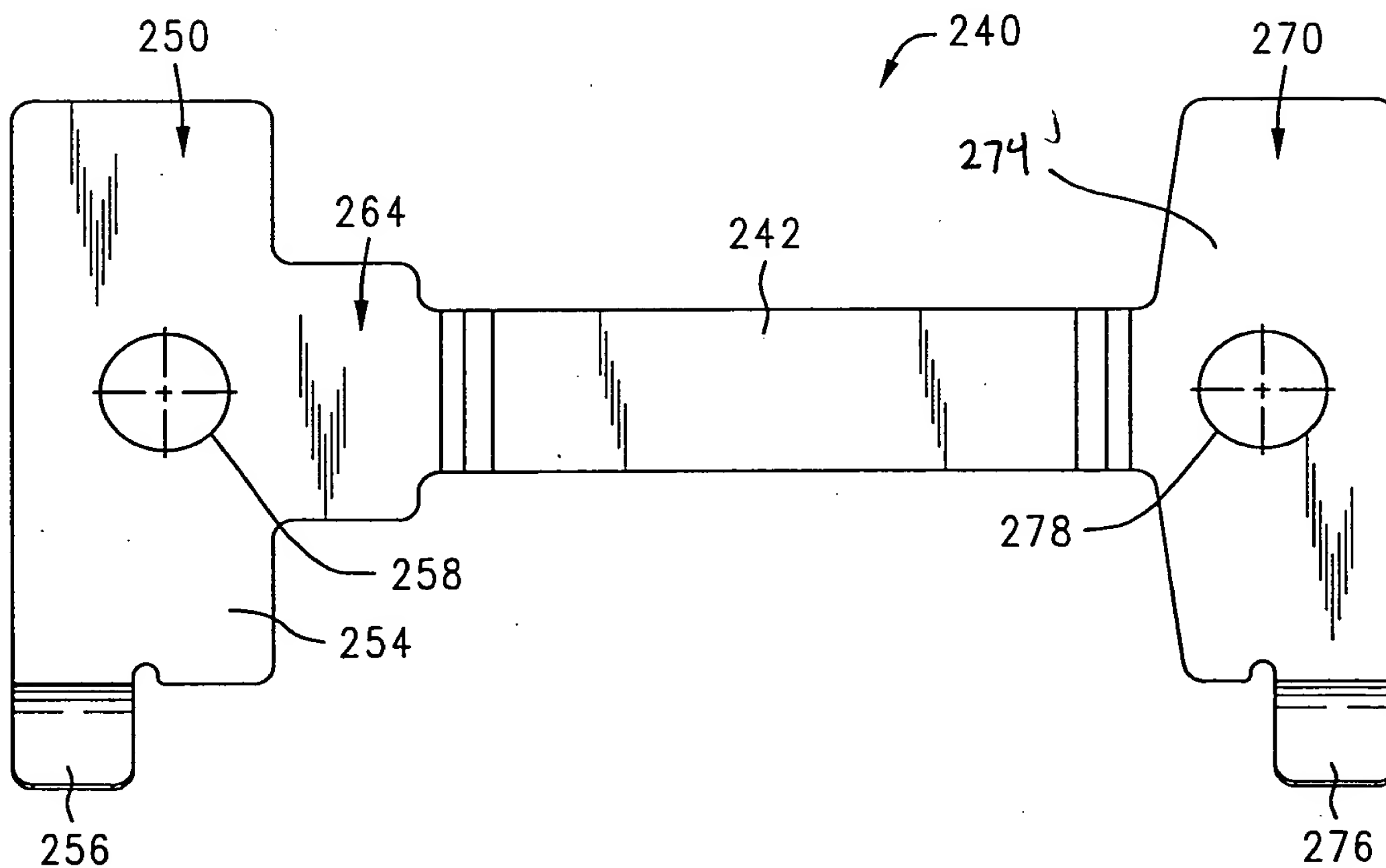


FIG. 8

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OKS



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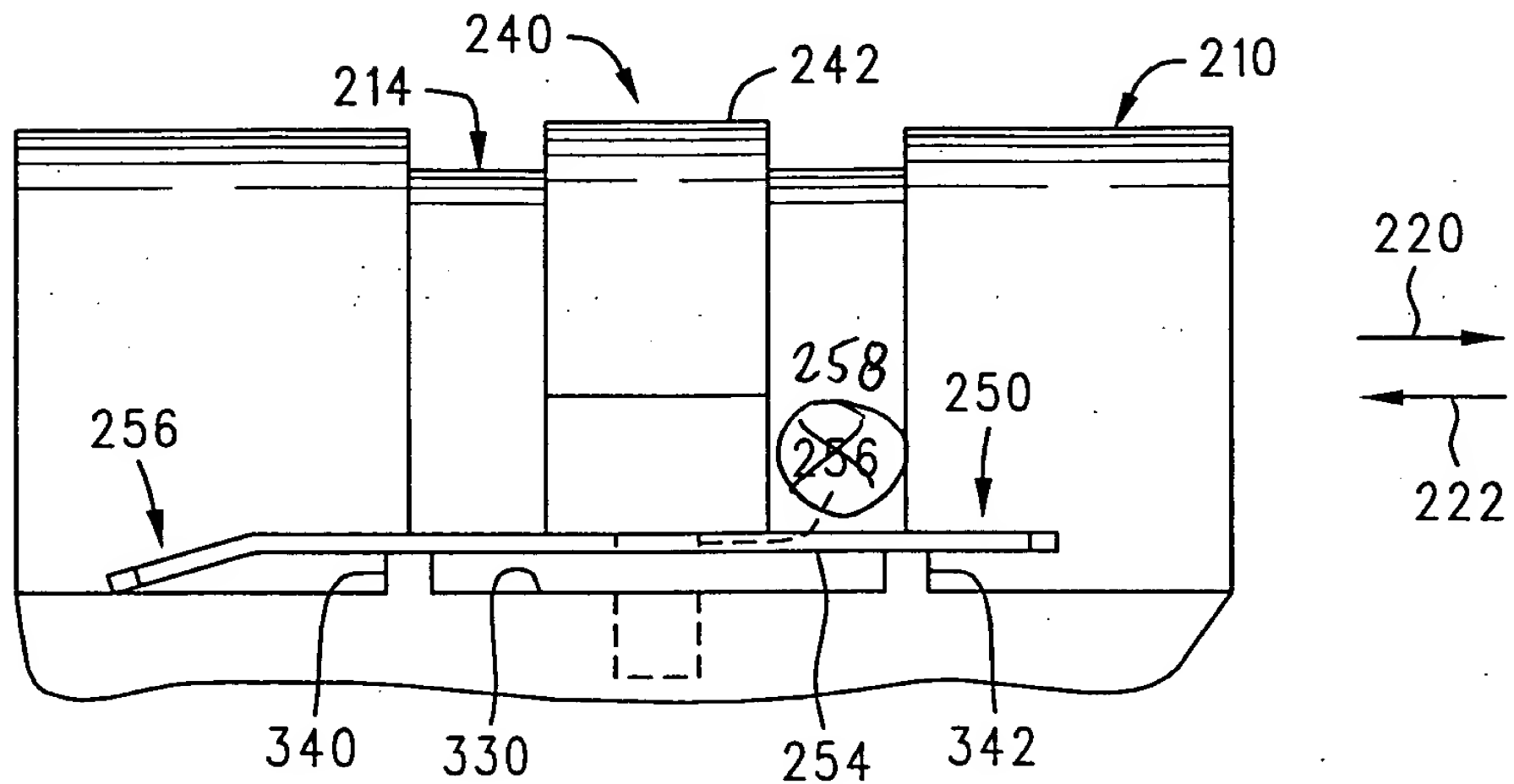


FIG. 9

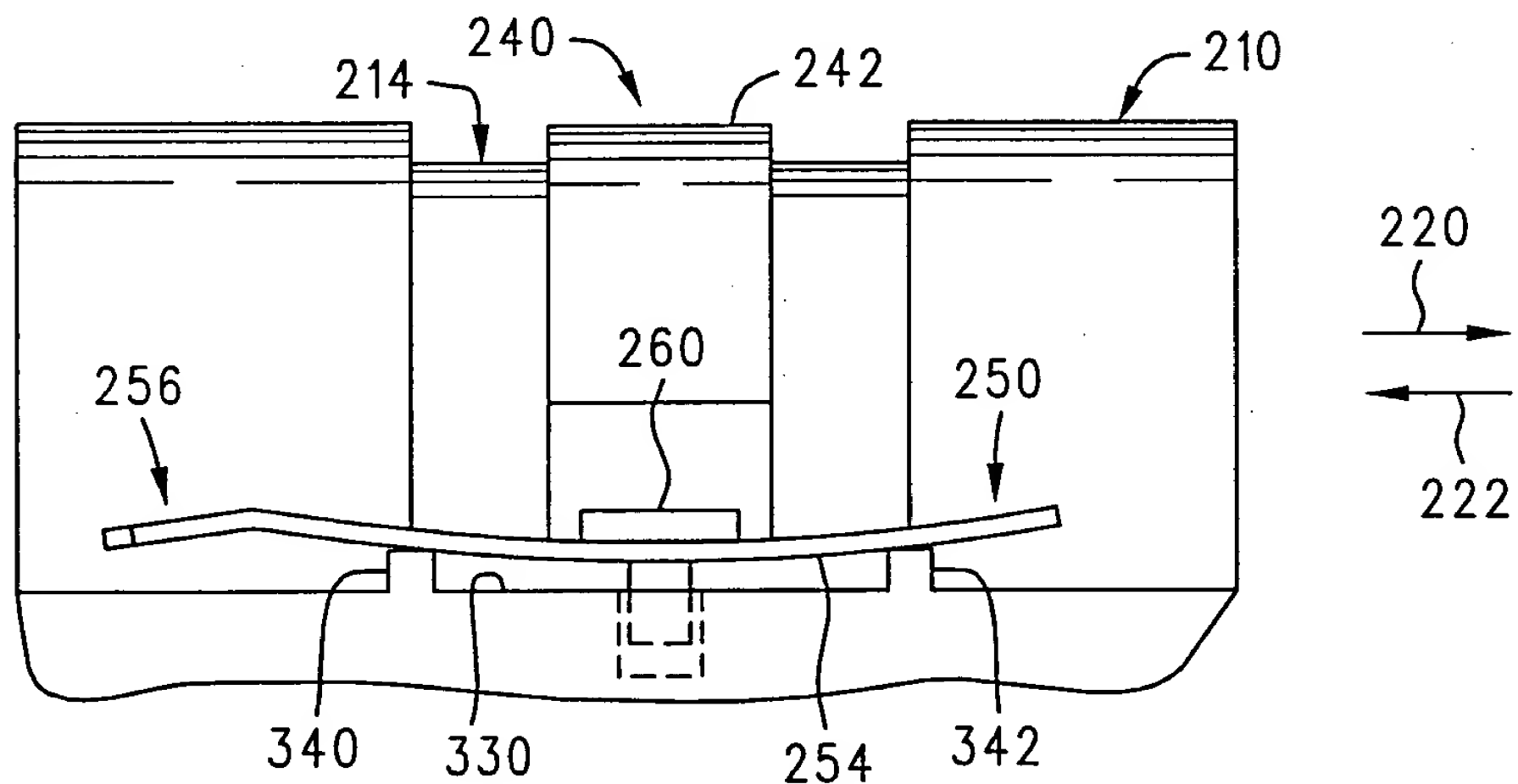


FIG. 10

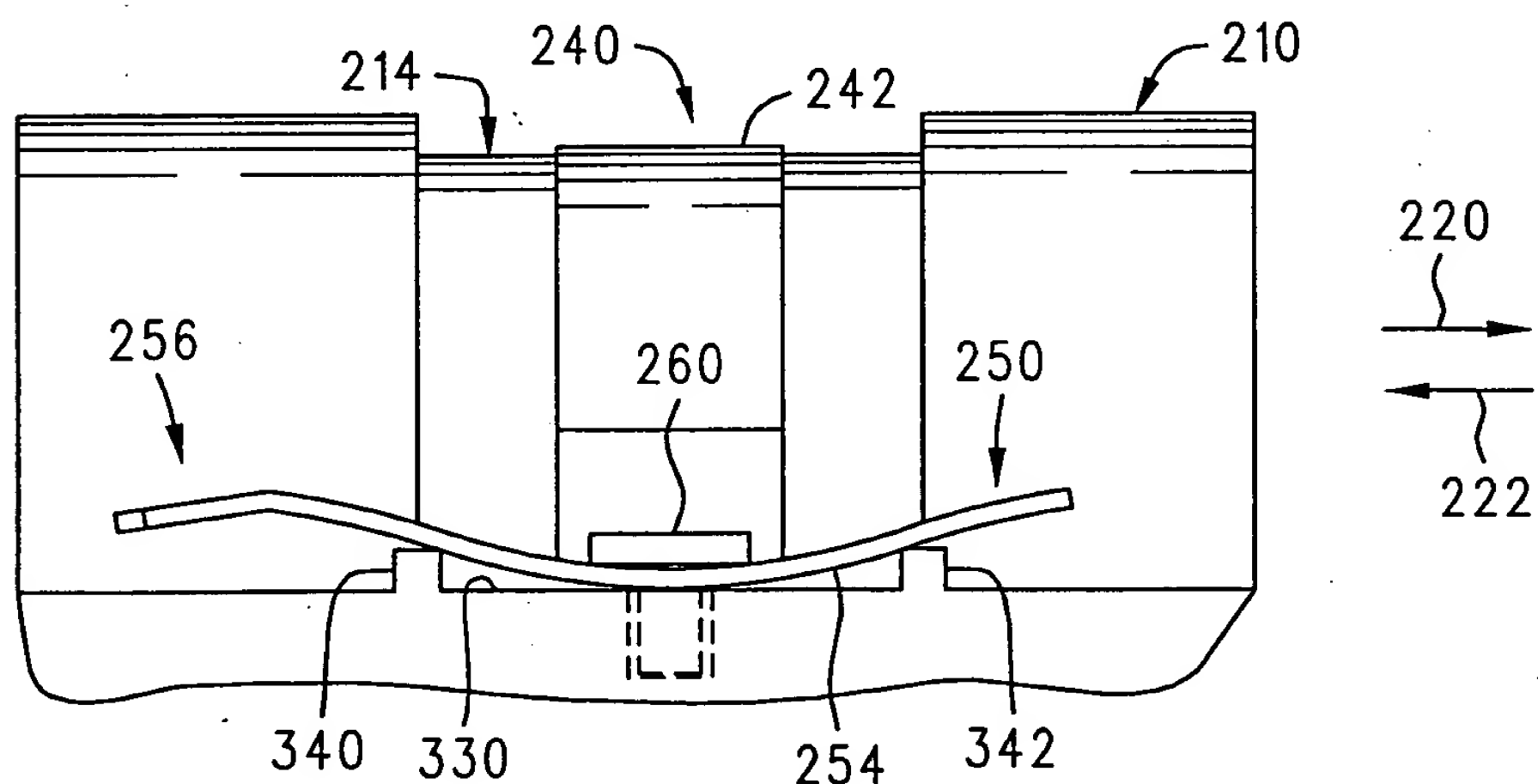


FIG. 11

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